

February 23, 2018

**VIA ELECTRONIC FILING**

Ms. Jocelyn Boyd  
Chief Clerk/Administrator  
Public Service Commission of South Carolina  
101 Executive Center Dr., Suite 100  
Columbia, SC 29210

RE: Duke Energy Progress, LLC - Proposed Modifications to the Residential  
Service - Load Control Rider LC-SUM  
**Docket No. 2015-163-E**

Dear Ms. Boyd:

Pursuant to Commission Order No. 2015-596, Duke Energy Progress, LLC ("DEP") hereby submits for approval modifications to its Residential Service - Load Control Rider LC-SUM ("Program") originally filed in Docket No. 2009-190-E. This letter is accompanied by the following attachments:

- Attachment A - The proposed program tariff;
- Attachment B - The projected program participation and impacts data; and
- Attachment C - The program cost-effectiveness test results.

The proposed modifications are designed to modernize the Program by classifying certain customer-owned "smart" thermostats as load control devices. To that end, DEP is requesting that the Commission approve the following modifications to the Program:

1. The inclusion of eligible thermostats and related incentives and service charges; and
2. Allow DEP to issue incentive payments in a variety of ways, including, but not limited to, bill credits, checks, and prepaid credit cards.

DEP will seek recovery of applicable Program costs and utility incentives through its annual Demand-Side Management and Energy Efficiency ("DSM/EE") cost-recovery rider, consistent with the DSM/EE cost-recovery procedures approved in Docket No. 2015-163-E.



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DEP respectfully requests Commission approval of the modifications to the Program tariff at the Commission's earliest convenience. Upon approval of the program by the Commission, DEP will complete its implementation plans and make the Program available to its customers in South Carolina as soon as reasonably possible.

Yours truly,

Frank R. Ellerbe, III

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Enclosures

cc w/enc: Parties of Record

RESIDENTIAL SERVICE - LOAD CONTROL  
RIDER LC-SUM-6AVAILABILITY

This Rider is available in conjunction with all residential service schedules. Participating Customers may choose to employ (1) Company-provided Load Control Device(s) or (2) eligible Customer-owned thermostat(s) to interrupt service to each installed, approved electric central air conditioning unit and/or electric heat pump and to monitor their operation under the provisions of this Rider.

Customer choosing to employ Company-provided Load Control Device(s) contracts for Company or its representative to install and operate the necessary control equipment in a location provided by Customer and suitable to Company in or about the residential dwelling unit. This option is only available where Company has the necessary communications equipment installed and where load control signal can be satisfactorily received at Company's specified location on Customer's residence.

Customers choosing to employ their own eligible thermostat(s), listed on the Company's website, must have the thermostat(s) configured in a manner which allows the Company to remotely communicate and control Customer's equipment.

Company shall be allowed to monitor Customer's load or any part thereof and the operation of controlled appliances, at no charge, to Customer under the provisions of this Rider. To participate in the program, Customer must either own and occupy the residence or occupy and provide Company with owner-consent.

PARTICIPATION INCENTIVES

Customer shall receive an Initial Incentive Payment following the successful installation and testing of the Load Control Device(s). Following each twelve months of continuous participation on the program Customer shall receive an additional Annual Incentive. Customer leaving the program may return anytime to the program, but shall not receive the Initial Incentive Payment and must complete a twelve month continuous participation on the program to receive an additional Annual Incentive.

REFERRAL INCENTIVE

A participating Customer shall receive a \$25 Incentive for each new program participant that provides a referral code and successfully enrolls in Rider LC-SUM. Successful enrollment shall include installation of the necessary control equipment in or about the new Customer's residential dwelling unit, to interrupt service to each installed, approved electric central air conditioning unit and/or electric heat pump. The maximum referral Incentive available to any participating Customer shall not exceed \$100 (or four referrals) per calendar year. The participating Customer will be provided the referral Incentive within 30 days of successful installation at the new Customer's premise. Company will verify and track referrals by unique referral codes provided to participating Customers. New Customers will be required to provide a referral code at the time of enrollment.

PAYMENT OF INCENTIVES

The Company's payment of Incentives may be offered in a variety of ways, including, but not limited to, bill credits, checks, and prepaid credit cards as follows:

- Initial Incentive for Company-provided Load Control Device(s) - \$25 per residence
- Initial Incentive for Customer-provided eligible Thermostat(s) - \$75 per residence
- Annual Incentive for Company-provided Load Control Device(s) - \$25 per residence
- Annual Incentive for Customer-provided eligible Thermostat(s) - \$25 per residence

### APPROVED CENTRAL AIR CONDITIONING UNIT

An approved electric central air conditioning and/or electric heat pump unit is a central electric air conditioning unit used to cool the residence through a ducted system. All central air conditioning and/or electric heat pump units installed at the residence must participate in load control in order to receive the Annual Incentive.

### INTERRUPTION

Company shall be allowed, at its discretion, to interrupt service to each air conditioner for up to four hours during each day of the summer control season months of May through September. Company reserves the right for longer interruption in the event continuity of service is threatened. Air conditioner interruptions shall be limited to a total of 60 hours during any one summer season. The Company reserves the right to test the load control equipment at any time, and such test periods shall be counted towards the maximum hourly interruption limit. Customer shall have the option to override an air conditioner based control event, however, if Customer exceeds two (2) control event overrides in a single control season of May through September, Customer may be subject to removal from the program and shall forfeit the next subsequent Annual Incentive for that controlled device. A control event override is defined as Customer requesting exemption from part or whole of the interruption time period. If Company is unable to communicate with Customer's thermostat(s) during a load control event, it will be counted as a control event override.

### EQUIPMENT INSPECTION AND SERVICING

Company or its agents shall have the right of ingress and egress to Customer's premises at all reasonable hours for the purpose of inspecting Company's wiring and apparatus; changing, exchanging, or repairing its property, as necessary; or removing its property after termination of service. Company and Customer shall schedule a convenient time for such purposes whenever it is necessary to service Company's equipment installed inside the residence. If any tampering with Company-owned equipment occurs, Company may adjust the billing and take other action in accordance with the Rules and Regulations of the Public Service Commission of South Carolina and the laws of the State of South Carolina as applicable to meter tampering.

### SALES AND FRANCHISE TAX OR PAYMENT IN LIEU THEREOF

To the above charges will be added any applicable South Carolina sales tax, and for those customers within any municipal or other local governmental jurisdiction, an appropriate amount to reflect any franchise fee, business license tax, or similar percentage fee or tax, or charge in lieu thereof imposed by such entity.

### CONTRACT PERIOD

The Contract Period shall not be less than one year. Customer or Company may terminate participation under the Rider by providing 30 days prior notice to the other party. If within the first year, the Customer wishes to discontinue participation in this Program, the Customers using Company provided Load Control Device(s) will pay a \$25 service charge and Customers who have received initial thermostat based incentive will pay a \$75 service charge. Upon termination, the load control device(s) at the Customer's residence will be remotely disabled to prevent further load control, but will only be removed upon request by Customer.

### COMPANY RETENTION OF PROGRAM BENEFITS

Incentives and other considerations offered under the terms of this Program are understood to be an essential element in the recipient's decision to participate in the Program. Upon payment of these considerations, Company will be entitled to any and all environmental, energy efficiency, and demand reduction benefits and attributes, including all reporting and compliance rights, associated with participation in the Program.

Effective for service rendered on and after \_\_\_\_\_  
SCPSC Docket No. 2015-237-E, Order No. 2018-\_\_\_\_\_

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## Bring Your Own Thermostat / EnergyWise Home (Summer)

### Attachment B Participation

Bring Your Own Thermostat / EnergyWise® Home		
1	Measure Life (Average)	1
2	Free Rider % (Average)	0%
3	Incremental Participants Year 1	21,944
4	Incremental Participants Year 2	51,544
5	Incremental Participants Year 3	79,062
6	Incremental Participants Year 4	105,351
7	Incremental Participants Year 5	133,428
8	Cumulative Participation Year 1	21,944
9	Cumulative Participation Year 2	51,544
10	Cumulative Participation Year 3	79,062
11	Cumulative Participation Year 4	105,351
12	Cumulative Participation Year 5	133,428
13	Cumulative Summer Coincident kW w/ losses (net free) Year 1	35,963
14	Cumulative Summer Coincident kW w/ losses (net free) Year 2	78,576
15	Cumulative Summer Coincident kW w/ losses (net free) Year 3	117,658
16	Cumulative Summer Coincident kW w/ losses (net free) Year 4	154,242
17	Cumulative Summer Coincident kW w/ losses (net free) Year 5	191,358
18	Cumulative kWh w/ losses (net free) Year 1	0
19	Cumulative kWh w/ losses (net free) Year 2	0
20	Cumulative kWh w/ losses (net free) Year 3	0
21	Cumulative kWh w/ losses (net free) Year 4	0
22	Cumulative kWh w/ losses (net free) Year 5	0
23	Per Participant Weighted Average Coincident Saved Winter kW w/ losses	0.05
24	Per Participant Weighted Average Coincident Saved Summer kW w/ losses	1.64
25	Per Participant Average Annual kWh w/ losses (net free) Year 1	0
26	Per Participant Average Annual kWh w/ losses (net free) Year 2	0
27	Per Participant Average Annual kWh w/ losses (net free) Year 3	0
28	Per Participant Average Annual kWh w/ losses (net free) Year 4	0
29	Per Participant Average Annual kWh w/ losses (net free) Year 5	0
30	Cumulative Lost Revenue (net free) Year 1	\$0
31	Cumulative Lost Revenue (net free) Year 2	\$0
32	Cumulative Lost Revenue (net free) Year 3	\$0
33	Cumulative Lost Revenue (net free) Year 4	\$0
34	Cumulative Lost Revenue (net free) Year 5	\$0
35	Average Lost Revenue per Participant (net free) Year 1	\$0
36	Average Lost Revenue per Participant (net free) Year 2	\$0
37	Average Lost Revenue per Participant (net free) Year 3	\$0
38	Average Lost Revenue per Participant (net free) Year 4	\$0
39	Average Lost Revenue per Participant (net free) Year 5	\$0
40	Total Avoided Costs/MW saved Year 1	\$109,196
41	Total Avoided Costs/MW saved Year 2	\$111,652
42	Total Avoided Costs/MW saved Year 3	\$114,311
43	Total Avoided Costs/MW saved Year 4	\$117,152
44	Total Avoided Costs/MW saved Year 5	\$120,084
45	Total Avoided Costs/MWh saved Year 1	N/A
46	Total Avoided Costs/MWh saved Year 2	N/A
47	Total Avoided Costs/MWh saved Year 3	N/A
48	Total Avoided Costs/MWh saved Year 4	N/A
49	Total Avoided Costs/MWh saved Year 5	N/A

## Bring Your Own Thermostat / EnergyWise Home (Summer)

### Attachment C Cost-Effectiveness Evaluation

Bring Your Own Thermostat / EnergyWise® Home					
		UCT	TRC	RIM	Participant
1	Avoided T&D Electric	\$66,828,683	\$66,828,683	\$66,828,683	\$0
2	Cost-Based Avoided Elec Production	\$0	\$0	\$0	\$0
3	Cost-Based Avoided Elec Capacity	\$86,687,111	\$86,687,111	\$86,687,111	\$0
4	Participant Elec Bill Savings (gross)	\$0	\$0	\$0	\$0
5	Net Lost Revenue Net Fuel	\$0	\$0	\$0	\$0
6	EM&V Costs	\$2,812,872	\$2,812,872	\$2,812,872	\$0
7	Implementation Costs	\$30,747,601	\$30,747,601	\$30,747,601	\$0
8	Incentives	\$21,803,002	\$0	\$21,803,002	\$21,803,002
9	Other Utility Costs	\$6,478,144	\$6,478,144	\$6,478,144	\$0
10	Participant Costs	\$0	\$0	\$0	\$0
11	Total Benefits	\$153,515,794	\$153,515,794	\$153,515,794	\$21,803,002
12	Total Costs	\$61,841,619	\$40,038,617	\$61,841,619	\$0
13	<b>Benefit/Cost Ratios</b>	<b>2.48</b>	<b>3.83</b>	<b>2.48</b>	
Data represents present value of costs and benefits over the life of the program.					